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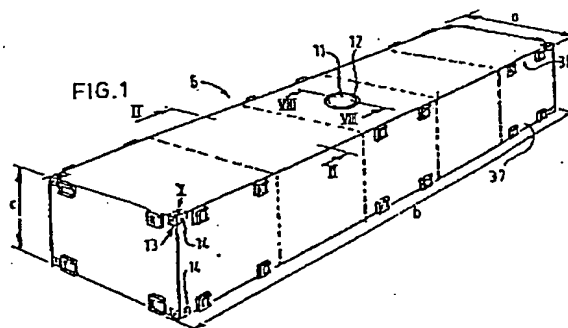
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54 Pontoon and floating body thereof.

57 A pontoon (6) is composed of a plurality of floating bodies having outer measures (a, b, c) corresponding with standard outer measures of a freight container, in order to reduce the transport costs to remote spots.



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Pontoon and floating body thereof.

The invention relates to a pontoon.

Pontoons are used with all sizes and shapes at different places for carrying out drill-, building- and/or elevationwork. Conveying the pontoon to a remote spot is expensive, particularly when the pontoon surface is great.

The invention has the object to reduce convey costs.

To this aim, the pontoon according to the invention is characterised by at least one floating body having outer measures corresponding with standard outer measures of a freight container. When determining the main measures of the pontoon according to the invention, it is not the use of the pontoon which is the main factor, but the standard measures of freight containers. As a result thereof, the pontoon can be conveyed with low costs by means of conveying means already numerous existing for the transport of freight containers. In case the pontoon is greater than a freight container according to the invention it is composed of a plurality of floating bodies having outer measures (a,b) corresponding with standard outer measures of a freight container.

The invention also provides a floating body for

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composition of a pontoon according to the invention.

The mentioned and other features of the invention will be illucidated with reference to a drawing in the following description.

5 In the drawing are represented by:

Fig. 1 a perspective view of a floating body according to the invention,

Fig. 2 on larger scale a perspective view partly broken away along line II-II of Fig. 1,

10 Fig. 3 on smaller scale a plan view of a sceme for the coupling operation for composing a preferred embodiment of a pontoon according to the invention,

Figures 4 and 5 plan views of each time another pontoon according to the invention,

15 Figures 6 and 7 perspective views of each time another pontoon according to the invention,

Figure 8 on larger scale a section over line VIII-VIII of Fig. 1,

20 Fig. 9 on larger scale a perspective view of detail IX of Fig. 3, partly broken away,

Fig. 10 on larger scale a perspective view of detail X of Fig. 6 with two stacked floating bodies according to the invention,

25 Fig. 11 a perspective view broken away of a variant of detail IX of Fig. 9, and

Fig. 12 a detail of a floating body according to the invention positioned on a container-vehicle.

Each of the pontoons of Figures 3-7 is composed of a plurality of floating bodies 6. Each floating body 6 of 30 Figures 1 and 2 consists of a closed rectangular prisma of steel with skin plates 7 reinforced by means of transverse inner frames 8 and longitudinal sections 9. These frames 8 and longitudinal sections 9 bound a great stock space 10 which can be used as conveying space, in which case the man- 35 hole 12 watertight sealed with a cover 11 is substituted by a great hatch way cover watertight sealed with a hatch way cover. Each floating body 6 has outer measures a and b corresponding with standard outer measures of a freight

container; that is to say,  
for instance that the length  $\underline{a}$  = 12, 190 m,  
and the width  $\underline{b}$  = 2,438 m.

Preferably the height  $\underline{c}$  = 2,438 m like the standard height of  
5 the freight containers, although it would be possible that  
the height  $\underline{c}$  would be different.

So these floating bodies 6 can be stowed easily in  
hoppers for freight containers and can be transported on  
truck chassis 40 (Fig. 12) adapted for freight containers.

10 The corners 13 of the floating body 6 are each provided with  
a couple box 14 recessed therein.

Such a couple box 14 can be coupled by means of a  
couple bolt 15 having a hammer head 17 and a nut 42 to a  
chassis 40 of a truck or to a ships' frame when this frame is  
15 adapted to such couple bolt. The couple box 14 has in its  
horizontal outer plane - at distances  $\underline{f}$  and  $\underline{g}$  from outer planes 38, which distances are standard in freight containers -  
a slot 16 so that one of both hammer heads 17 of a couple pen  
45 can pass and has inspection apertures 18 for inspecting  
20 the lock position of the couple pen 45. The couple pen 45 is  
received in an intermediate part 42 and can be turned therein  
by means of a disconnectable operation rod 43. The dislocked  
position and the lock position of the couple pen 45 are assured  
with spring means not shown.

25 The floating bodies 6 of pontoons 1-5 are coupled  
in pairs by means of couplings 19 arranged at the upper- and  
lower edges 36 and 37. Of each coupling 19 a male part 20 is  
arranged at the one floating body  $6_{\underline{r}}$  and a female part 21  
is arranged at the other floating body  $6_{\underline{t}}$ . The interconnec-  
30 tion of two floating bodies 6 is obtained by positioning them  
side by side quite close to each other and by moving them  
relatively to each other according to arrows 22 of Fig. 3. In  
Fig. 3 two pair of floating bodies 6 already interconnected  
with their front planes 23 are interconnected by causing the  
35 engagement of coupling parts 20 and 21 during a relative movement  
according to arrows 24. A great pontoon 2 with many  
floating bodies 6 can be composed in this way.

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As shown in Fig. 9 the coupling parts 20 and 21 engage each other with wedge operation, resulting in that they automatically move into their couple position during the coupling operation and that they engage each other rattle-free by means of wedge planes 26 and 27. The unexpected disconnection of interconnected floating bodies 6 is preferably prevented by means of locking means 25 of Fig. 11. When the coupling parts 20 and 21 engage each other, a locking member 28 consisting of a conical pin, can be put in a conical hole constituted by two recesses 31 and 32 facing each other of coupling parts 20 and 21. The locking member 28 can be drawn from its locking position by means of its lug 33.

The floating bodies 6 can be interconnected in such way that an opening 29, e.g. a drill opening, according to Fig. 5 or Fig. 6 is provided in the center. A wall 35 can be built on the pontoon 4 by stacking floating bodies 6. A protruding platform 34 can be provided at the pontoon 5 by interconnecting floating bodies 6 in receding fashion. A gin 41 can be positioned on this platform 34.

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C L A I M S

1. Pontoon (1-5), characterised by at least one floating body (6) having outer measures (a,b) corresponding with standard outer measures of a freight container.

2. Pontoon (1-5), characterised in that it is composed of a plurality of floating bodies (6) having outer measures (a,b) corresponding with standard outer measures of a freight container.

3. Pontoon (1-5) as claimed in claim 2, characterised in that the floating bodies (6) are coupled to each other by means of couplings, a male part (20) of each coupling being arranged to the one and a female part (21) thereof being arranged to the other of a pair of floating bodies (6) to be interconnected.

4. Pontoon (1-5) as claimed in claim 3, characterised in that the coupling parts (20, 21) engage each other with wedge engagement.

5. Pontoon (1-5) as claimed in claim 3 or 4, characterised in that at least one coupling (19) is provided with lacking means (25).

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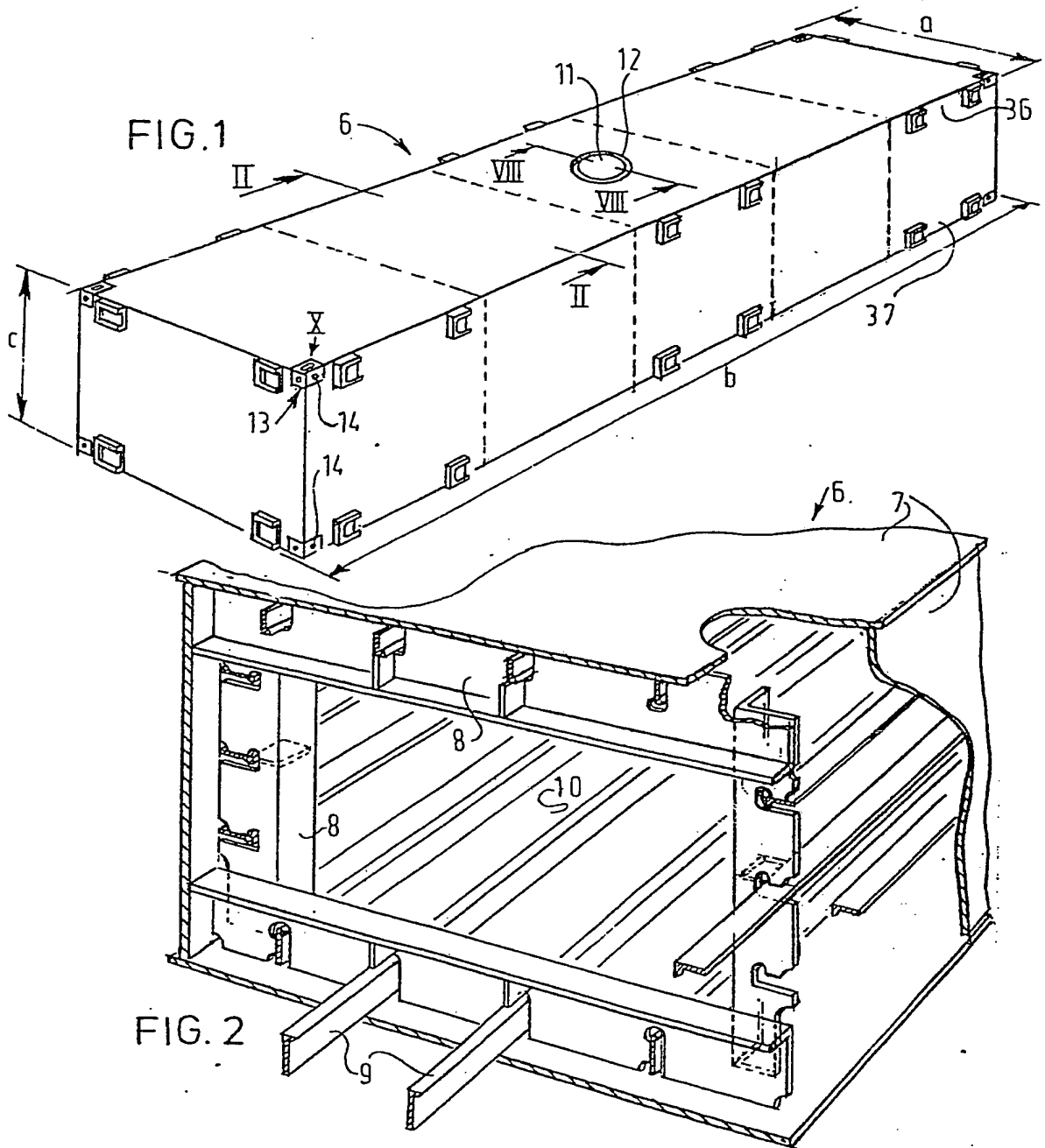
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6. Pontoon (1-5) as claimed in any one of claims 2-5, characterised in that a plurality of floating bodies (6) positioned at the same level are interconnected with their upper- and lower edges (36, 37) by means of coupling means (19).

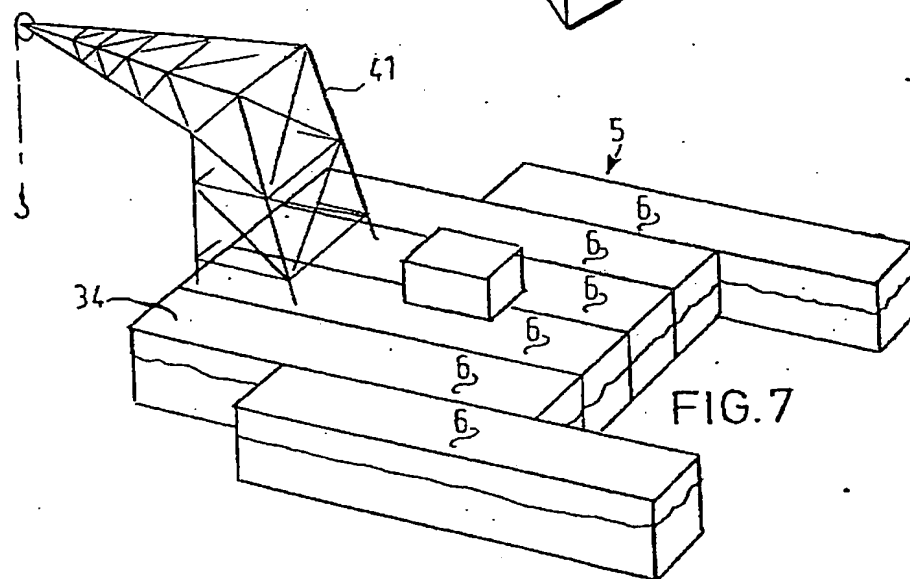
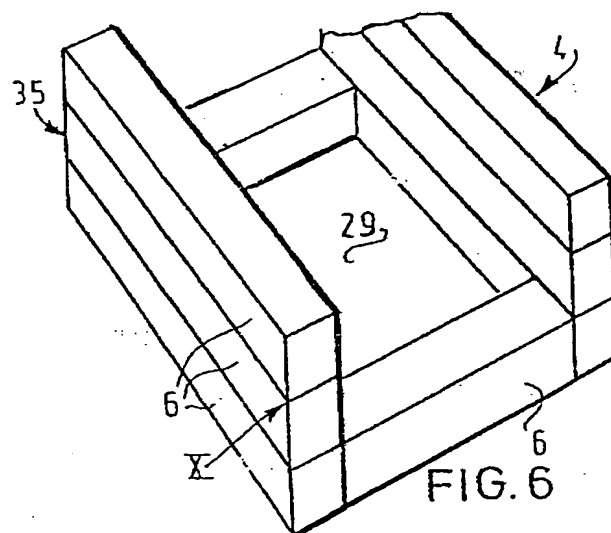
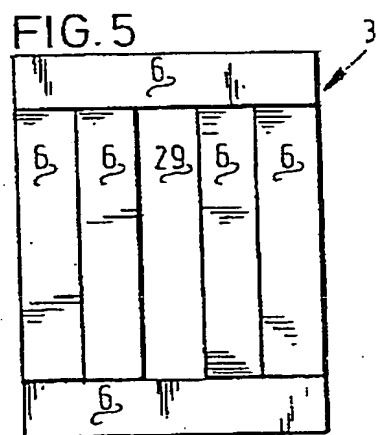
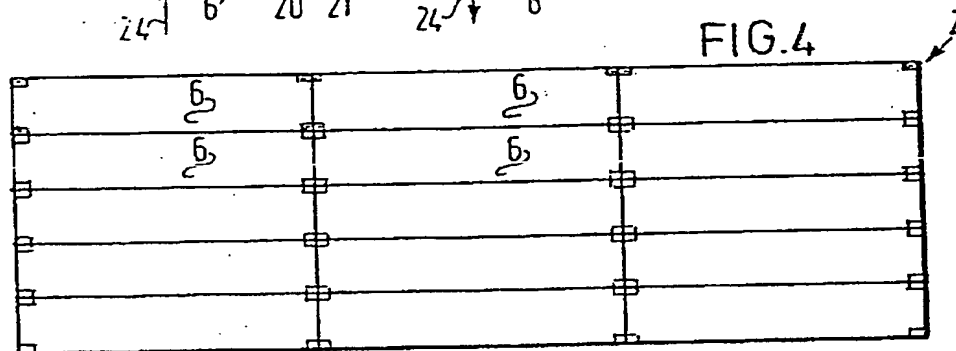
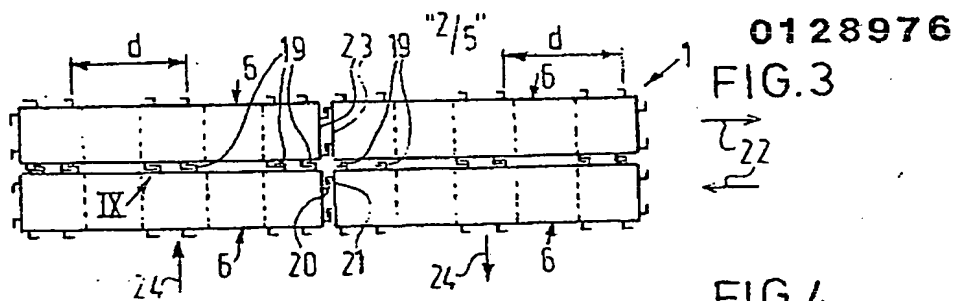
7. Floating body (6) for composing a pontoon (1-5) according to any one of the preceding claims, characterised in that coupling parts (20, 21) are arranged uniform spaced at at least one side of the floating body (6).

8. Floating body (6) as claimed in claim 7, characterised in that the floating body (6) is provided with disconnectable connecting means (14) for connection to connecting means (14) of a substantially identical floating body (6) stacked thereon.

9. Floating body (6) as claimed in claim 7 or 8, characterised in that it has small inner frames (8), bounding a great stock space (10).

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$\frac{3}{5}$ 

FIG. 8

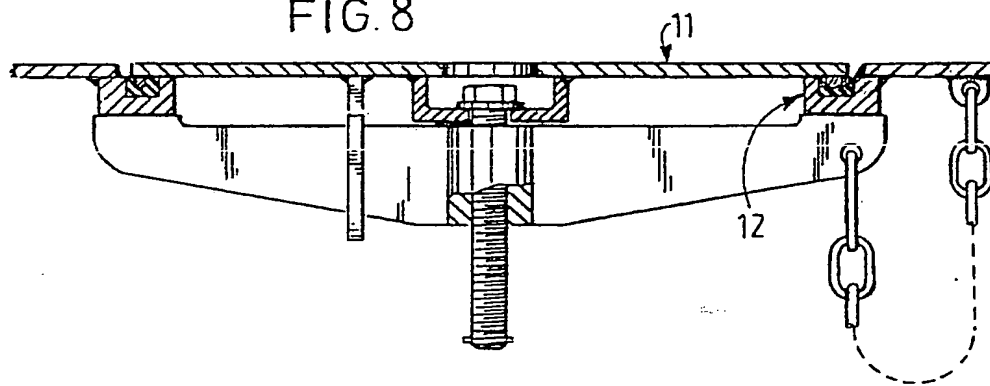
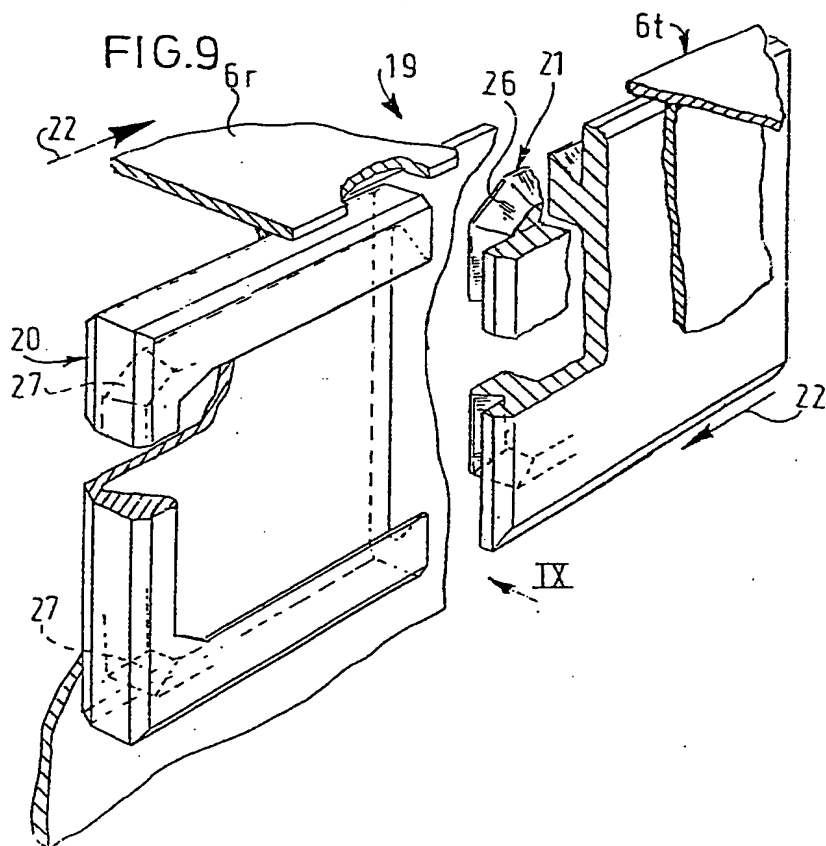
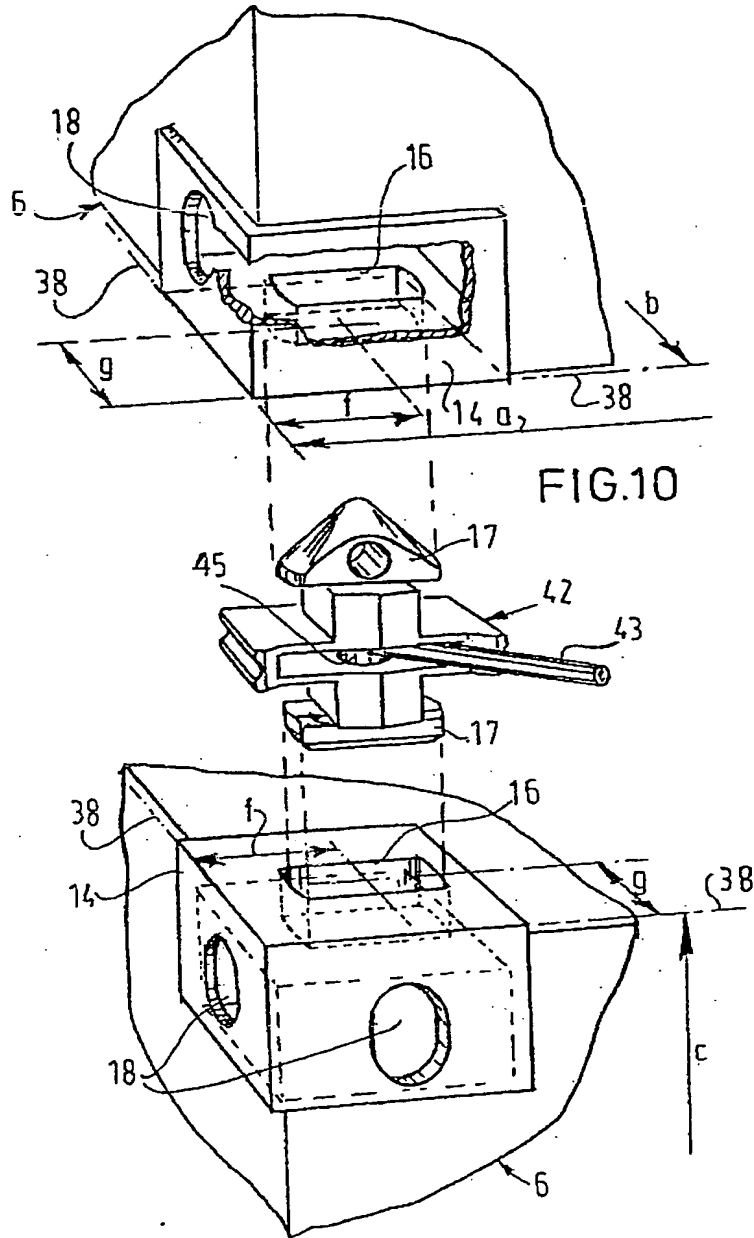


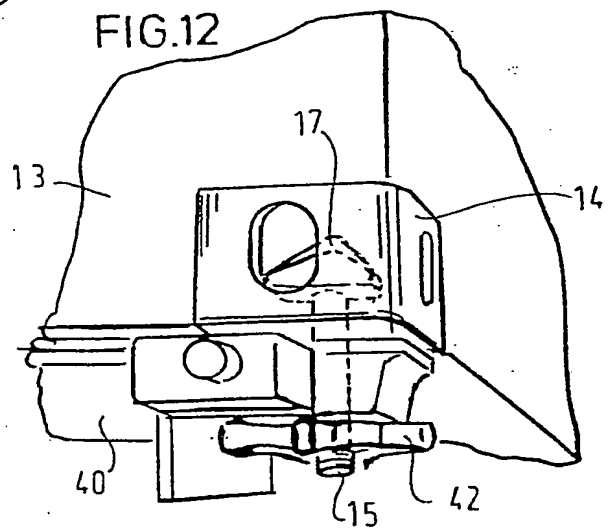
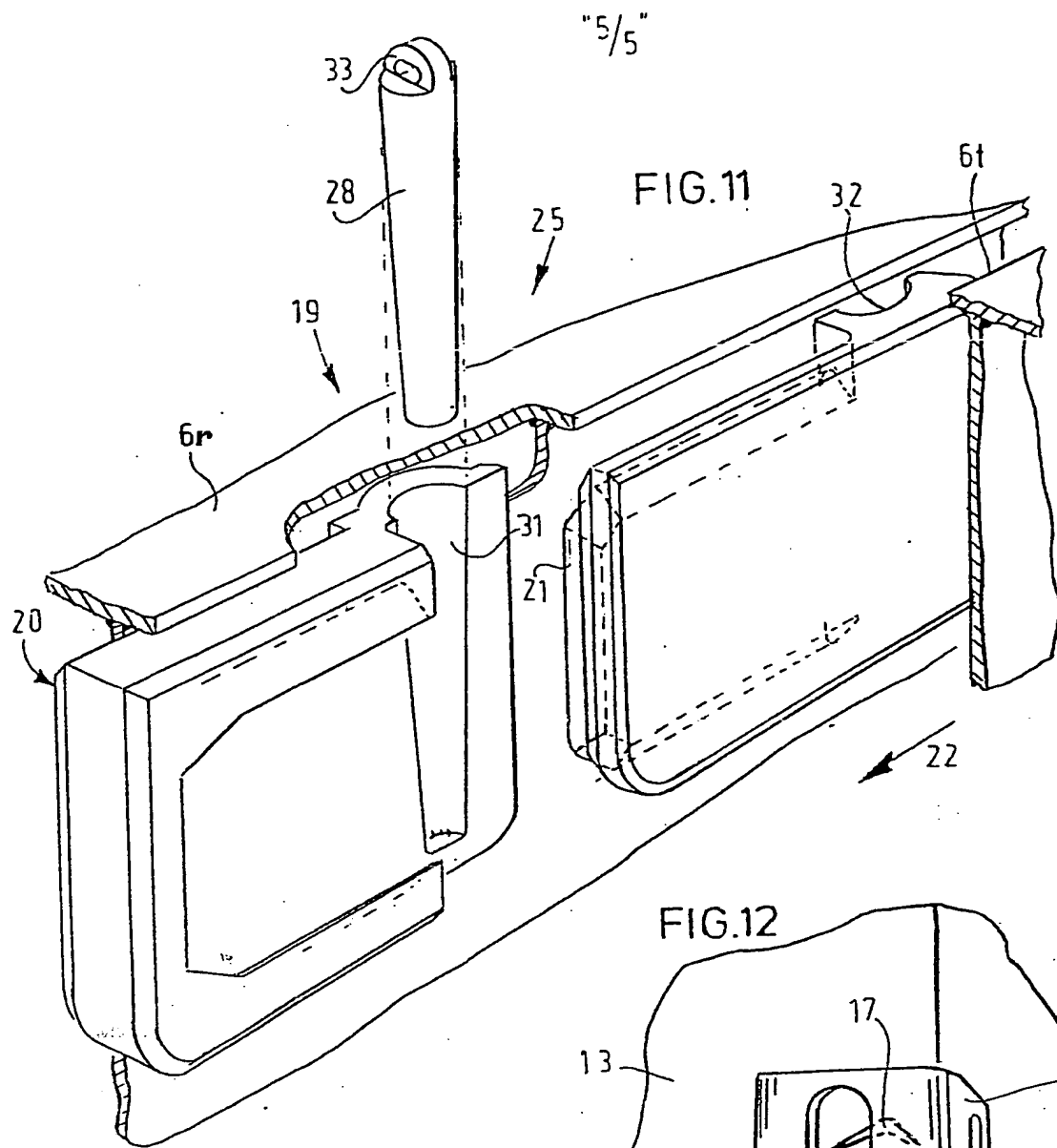
FIG. 9



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# EUROPEAN SEARCH REPORT

**0128976**  
Application number

EP 83 20 0892

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
X	DE-A-2 651 247 (RZEHULKA) * the whole document *	1, 2	B 63 B 35/38
X	DE-A-2 725 060 (RZEHULKA) * the whole document *	1, 2, 6, 8, 9	
A	DE-A-1 531 582 (LICENTIA PATENT) * figures 1, 2 *	3, 5	
A	US-A-1 900 319 (VERMEULEN) * figures 7-10 *	3, 4	
A	FR-A-2 379 426 (SIMONNEAU) * page 8, lines 18-24; figures 9-11 *	9	TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
A	US-A-3 587 503 (STEHR)		B 63 B
A	FR-A-1 177 942 (ROBISHAW)		
A	FR-A-2 389 033 (CONSTRUCTION NAVALES ET INDUSTRIELLES DE LA MEDITERRANEE)		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 08-02-1984	Examiner DE SCHEPPER H.P.H.
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